

# INON

## INON -1.5 White Diffuser 2 (External Auto)

## INON -1.5 Blue Diffuser 2 (External Auto)

Thank you for purchasing INON product.

-1.5 White/Blue Diffuser 2 (External Auto) is for INON 「Z-240」 / 「D-2000W」 / 「D-2000Wn」 / 「D-2000」 / 「D-180」 / 「D-180S」. The diffuser is compatible with all strobe modes including External Auto mode, S-TTL Auto mode, TTL Auto mode, Manual + TTL Auto mode and Manual mode.

This diffuser is exclusively for 「Z-240」, 「D-2000W」, 「D-2000Wn」, 「D-2000」, 「D-180」 or 「D-180S」 but can not be used for 「D-2000S」, 「Z-220F」, 「Z-220S」 or 「Z-220」.

### Features

- Widen strobe beam angle (circular light distribution 100° → 110°) and soften light quality.
- 『Blue』 Diffuser compensate/ease yellowish/reddish compensation characteristic mainly by Canon digital camera. (Different model from standard “『White』 Diffuser”).
- Two Focus Light filters are included to support various shooting situations; 『W40° Filter・LE』 which has fly-eye lens construction to effectively widen Focus Light coverage and 『Red Filter・LE』 to change color tone of the Focus Light so that it will not stimulate light-sensitive subject.

**Package contents** :  
• -1.5 [White or Blue] Diffuser 2 (External Auto) (image shows [White] Diffuser 2) ① × 1  
• W40° Filter・LE ② × 1  
• Red Filter・LE ③ × 1  
• This User Manual × 1  
• User manual of filters × 1

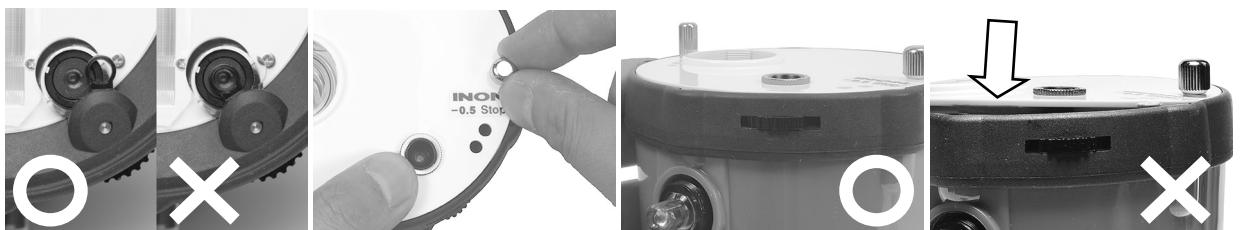
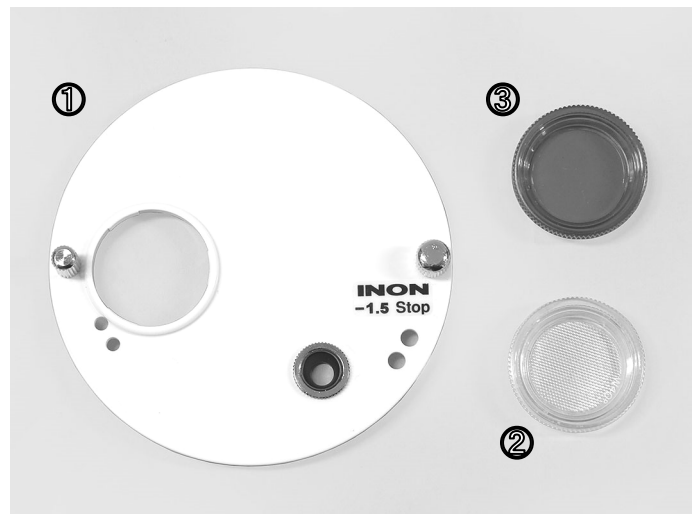
**Compatible strobe** :  
(as of July 2009)  
• INON Z-240, D-2000W, D-2000Wn, D-2000, D-180, D-180S

**Compatible flash mode**:  
(as of July 2009)  
• External Auto mode, S-TTL Auto mode, TTL Auto mode, Manual + TTL Auto mode, Manual mode

**Compatible camera system** :  
(as of July 2009)  
• **[Blue] Diffuser:**  
Specific digital camera system (especially Canon digital camera system) which has tendency to get yellowish/reddish image and hard to get natural color image.  
• **[White] Diffuser:**  
Digital camera system other than above. Or specific digital camera system (especially Canon digital camera system) which can have natural color image.

**Preparation** :  
• **Attach 『W40° Filter・LE』 / 『Red Filter・LE』 (not mandatory).**  
Attach 『W40° Filter・LE』 or 『Red Filter・LE』 on a “-1.5 Diffuser 2” depending on subject/shooting condition/camera system/flash mode.  
Please see user manual of filters for detail.

**How to attach** :  
• **Turn off “+1/4EV.Compensation Switch” [Z-240, D-2000W, D-2000Wn, D-2000, D-180] / “+1/2EV.Compensation Switch” [D-180S]**  
Set “+1/4EV. Compensation Switch” (Z-240, D-2000W, D-2000Wn, D-2000, D-180) or “+1/2EV.Compensation Switch” (D-180S) to OFF position.  
• **Attach diffuser**  
Set the diffuser on 「Z-240」 / 「D-2000W」 / 「D-2000Wn」 / 「D-2000」 / 「D-180」 / 「D-180S」 and tighten the screw above INON logo first then tighten another screw with holding a part which covers “Light Adjustment Sensor” with thumb. Do not tighten too much to prevent damage to “Diffuser 2” itself or screw holes of strobe.  
Check and make sure the part which covers “Light Adjustment Sensor”, does not lift up.



- Handling precaution:**
- When using External Auto mode**  
 This diffuser gives brighter image at +1/3EV.(approx. +0.33 stop) comparing to an image without the diffuser. [Same effect as compensate flash output at +1/3EV.(approx. +0.33 stop) ].  
 “+1/4EV.Compensation Switch”[Z-240, D-2000W, D-2000Wn, D-2000, D-180] / “+1/2EV.Compensation Switch”[D-180S] is fixed at OFF[without flash output compensation] position. Compensation switch **can not be set to ON.**

**If necessary, compensate by adjusting aperture value on camera/strobe depending on your shooting condition.**

And settable aperture range in External Auto mode is shifted to subject side at -3/2EV.(-1.5 stop) compare to settable aperture range without diffuser.

Please refer to user manual of strobe for detail of External Auto/Flash output compensation/settable aperture range.

- When using Manual mode [Z-240, D-2000W, D-2000Wn, D-2000, D-180]**  
 Actual flash output is 3/2EV.(1.5 stop) less than selected value at “Main Mode Switch”. [an image gets -3/2EV.(-1.5 stop) dark compared to an image without the diffuser]

Actual flash output of Z-240 with the -1.5 Diffuser for each switch position. ([※]:air/ISO100·m)

Main Mode Switch	EV. Control Switch	Guide Number with the -1.5 Diffuser [air/ISO100·m]	Relative Flash output to FULL(G.N.24[※]) without the -1.5 Diffuser		
			[EV.]	[absolute value]	
<b>FULL</b>	(any position)	approx. 14	-1.5EV.	approx.1/2.8	
<b>M<sup>-0.5</sup>▼.6</b>	<b>11 (-0.5)</b>	approx.12	-2.0EV.	approx.1/4.0	
	-	approx.10	-2.5EV.	approx.1/5.7	
	<b>8</b>	approx.8.5	-3.0EV.	approx.1/8.0	
	-	approx.7.1	-3.5EV.	approx.1/11	
	<b>5.6</b>	approx.6.0	-4.0EV.	approx.1/16	
	-	approx.5.0	-4.5EV.	approx.1/23	
	<b>4</b>	approx.4.2	-5.0EV.	approx.1/32	
	-	approx.3.6	-5.5EV.	approx.1/45	
	<b>2.8</b>	approx.3.0	-6.0EV.	approx.1/64	
	-	approx.2.5	-6.5EV.	approx.1/91	
	<b>2</b>	approx.2.1	-7.0EV.	approx.1/128	
	-	<b>(M-6)</b>	approx.1.8	-7.5EV.	approx.1/181

Actual flash output of D-2000W, D-2000Wn, D-2000 with the -1.5 Diffuser for each switch position. ([※]:air/ISO100·m)

Main Mode Switch	EV. Control Switch	Guide Number with the -1.5 Diffuser [air/ISO100·m]	Relative Flash output to FULL(G.N.20[※]) without the -1.5 Diffuser		
			[EV.]	[absolute value]	
<b>FULL</b>	(any position)	approx.12	-1.5EV.	approx.1/2.8	
<b>M<sup>-0.5</sup>▼.6</b>	<b>11 (-0.5)</b>	approx.10	-2.0EV.	approx.1/4.0	
	-	approx.8.4	-2.5EV.	approx.1/5.7	
	<b>8</b>	approx.7.1	-3.0EV.	approx.1/8.0	
	-	approx.5.9	-3.5EV.	approx.1/11	
	<b>5.6</b>	approx.5.0	-4.0EV.	approx.1/16	
	-	approx.4.2	-4.5EV.	approx.1/23	
	<b>4</b>	approx.3.5	-5.0EV.	approx.1/32	
	-	approx.3.0	-5.5EV.	approx.1/45	
	<b>2.8</b>	approx.2.5	-6.0EV.	approx.1/64	
	-	approx.2.1	-6.5EV.	approx.1/91	
	<b>2</b>	approx.1.8	-7.0EV.	approx.1/128	
	-	<b>(M-6)</b>	approx.1.5	-7.5EV.	approx.1/181

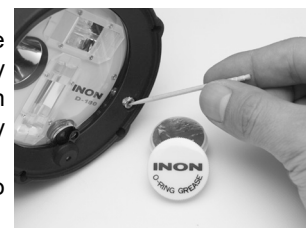
Actual flash output of D-180 with the -1.5 Diffuser for each switch position. ([※]:air/ISO100·m)

Main Mode Switch	Guide Number with the -1.5 Diffuser [air/ISO100·m]	Relative Flash output to FULL(G.N.18[※]) without the -1.5 Diffuser	
		[EV.]	[absolute value]
<b>FULL</b>	approx.11	-1.5EV.	approx.1/2.8
<b>M-2</b>	approx.5.3	-3.5EV.	approx.1/11
<b>M-3</b>	approx.3.8	-4.5EV.	approx.1/23
<b>M-4</b>	approx.2.7	-5.5EV.	approx.1/45

Please see user manual of strobe for detail of Manual flash setting.

- When using S-TTL Auto / TTL Auto [Z-240, D-2000W, D-2000Wn, D-2000]/ Manual + TTL Auto [Z-240, D-2000W, D-2000Wn]**  
 With the -1.5 Diffuser being attached, S-TTL Auto/TTL Auto/Manual + TTL Auto metering range shifts to subject side at -3/2EV.(-1.5 stop) compare to range without the -1.5 Diffuser. But actual flash output remains same if single strobe configuration within strobe’s auto metering range operation is exercised. Please see user manual of strobe for detail of S-TTL/TTL Auto/Manual + TTL Auto, flash output compensation or metering range.

- Maintenance :**
- Make sure to detach the diffuser from strobe** after diving and soak the diffuser in fresh water (below 30°C / 86°F) for several hours to dissolve any salt build up. Blow off water drop by air gun/blower and dry the diffuser in shaded and well ventilated area. It may take several days to completely dry.  
 Periodically grease up the screw holes (to fix the diffuser) of your strobe to avoid 「salt build-up」 or 「ionization」 which may cause sticking.



INON Inc.  
 2-18-9, Dai, Kamakura Kanagawa 247-0061 Japan  
 E-mail [support@inon.co.jp](mailto:support@inon.co.jp) / Fax. +81(0)467-48-2178  
 URL <http://www.inon.co.jp/>

July 2009